

ABSTRACT OF THE DISCLOSURE

A system is disclosed for detecting the presence of an article. The system includes a transmitter for radiating a first electromagnetic signal at a predetermined primary frequency and a resonant tag secured to the article. The resonant tag generates a second electromagnetic signal in response to receiving the first electromagnetic signal. The second electromagnetic signal has components at the primary frequency and at a predetermined secondary frequency different from the primary frequency. The system also includes a receiver for receiving the second electromagnetic signal and a computer connected to an output of the receiver. The computer processes the received second electromagnetic signal and generates an output signal when the secondary frequency is detected in the second electromagnetic signal.